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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,150	08/10/2001	Thiam Wah Loh	70003175-1	3987

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
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EXAMINER

TRUJILLO, JAMES K

ART UNIT	PAPER NUMBER
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2116

DATE MAILED: 10/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,150

Applicant(s)

LOH ET AL.

Examiner

James K. Trujillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The office acknowledges the receipt of the following and placed of record in the file:
Application filed 8/10/01.
2. Claims 1-8 are presented for examination.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the operating system as per claim 3 and the plurality of agent records as per claim 5 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and

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informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Dayan, U.S. Patent 5,230,052.

6. As to claim 6, Dayan taught a boot-up process for booting a processing device, wherein an agent is saved in a read only memory, wherein the agent code contains a first agent record identification code (inherent because the agent record of Dayan must locate and call the agent record [an appropriate BIOS]). Dayan further teaches wherein a plurality of agent records each containing a second agent record identification code (a list of devices from which the local system will attempt to procure a BIOS and autoconfiguration instructions; col. 6 lines 22-28), a register identification code and data is saved in an erasable and programmable memory device (agent record is stored on a hard disk; a hard disk is an erasable and programmable memory device; col. 6 lines 29-47). Dayan also teaches and wherein the boot-up process comprises the following steps:

- a. initializing a plurality of registers (initialize the local computer) in the processing device (col. 6 lines 3-14 and col. 7 lines 15-20);

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- b. reading the plurality of agent records and checking as to whether a match between a second agent record identification code and the first agent record identification code exists (discover a path to a remote computer system from a plurality of devices; col. 6 lines 10-11 and col. 6 lines 22-28);
 - c. for the case that a match is found to exist (a boot image is found according to the data in the local ROM; col. 6 lines 10-11), assigning the data of the matching agent record to a specified register according to the register identification code of the matching agent record (as part of the booting process; and col. 7 lines 15-33);
7. As to claims 1 and 7, Dayan taught the claimed boot-up process therefore he also taught the claimed method and the claimed electronic device.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-5 and 7-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Tamori et al., U.S. Patent 5,960,455 in view of Dayan et al., U.S. Patent 5,960,455.
10. As to claim 1, Tamori teaches a method for executing an agent code, wherein an agent record containing data is saved in an erasable and programmable memory device, and wherein the method comprises the following steps:

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- a. reading the agent code (data which is first read into the memory when the processor is started up) from the read only memory and loading it into a processing device (col. 6 lines 8-10);
- b. executing the agent code, thereby initiating reading the agent record from the erasable and programmable memory device and loading it into the processing device (BIOS in flash ROM portion 91a; col. 5 lines 30-38 and col. 5 lines 49-52); and
- c. executing the agent record in the processing device (col. 6 lines 18-31).

Specifically, Tamori teaches reading the agent code used when a processor is started up and is thus loaded into the processor. The agent code is stored in a memory location that cannot be rewritten. Tamori's agent code executed causing the agent record (updateable BIOS) to be loaded into the processor and subsequently executed.

Tamori does not expressly teach wherein the agent code is saved in a read only memory. However, Tamori discloses that his agent code is stored in a location of flash memory that cannot be rewritten.

Dayan teaches agent code (minimal portion of BIOS code) that is stored in a read only memory (col. 6 lines 3-14). Like Tamori, Dayan teaches a computer system that uses agent code to read an agent record (the remainder of BIOS). Further, Dayan would suggest to those of ordinary skill that the ROM is used for the agent code to prevent the agent code from being overwritten, thus protecting the agent code.

It would have been obvious to those of ordinary skill in the art having the teachings of Tamori and Dayan before him at the time the invention was made to modify the agent code of

Tamori by storing in a read only memory as taught by Dayan in order to prevent the agent code from being overwritten. Further, Tamori suggests that the region where the agent code is stored should not be overwritten.

11. As to claim 2, Tamori together with Dayan taught the method according to claim 1 as described above. Tamori further teaches wherein executing the agent record (BIOS) containing instructions and data is performed by adding the data of the agent record to a specified register of the processing device according to the instructions of the agent record (col. 1 lines 43-55).

Those of ordinary skill will understand that the CPU processes the agent record (BIOS) of Tamori. In processing the agent record the limitations of claim 2 are inherent.

12. As to claim 3, Tamori together with Dayan taught the method according to claim 1 as described above. Tamori further teaches wherein the processing device is realized by a central processing unit of a computer device (col. 1 lines 43-46), wherein the agent code is realized by an operating system for the computer device, wherein the agent record contains instructions and data, and wherein executing both, the agent code and the agent record is realized by a boot-up process of the computer device (col. 5 lines 30-38).

13. As to claim 4, Tamori together with Dayan taught the method according to claim 1 as described above. Tamori further taught wherein data of the agent record correct at least one sequence in a specified register of the computer device according to the instructions of the agent record (col. 7 lines 26-35). Specifically, Tamori teaches that the agent record may be replaced with another agent record to correct a problem with the former agent record.

14. As to claim 5, Tamori together with Dayan taught the method according to claim 3 as described above. Tamori further taught wherein data of the agent record add at least one

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sequence to a specified register of the computer device according to the instructions of the agent record. Specifically, the agent record of Tamori is a BIOS, which is a set of computer instructions, that is executed by the computing device (CPU). It is inherent that when executing instruction that data of the agent record is added to at least one sequence to a specified register of the computer.

15. As to claims 7 and 8, Tamori together with Dayan taught the claimed method. The claimed electronic device contains substantially the same limitations as the claimed method.

Therefore, Tamori also teaches the claimed electronic device.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,665,813 to Forsman et al. This patent teaches using flash memory for recovering code.

U.S. Pat. No. 6,446,203 to Aguilar et al. This patent teaches a method for selecting from multiple boot code images.

U.S. Pat. No. 6,308,265 to Miller. This patent teaches a system that uses flash memory for protecting boot block code.

U.S. Pat. No. 6,105,130 to Wu et al. This patent teaches a method for selecting from multiple boot code images from a peripheral device.

U.S. Pat. No. 5,964,873 to Choi. This patent teaches a method for updating a ROM BIOS.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James K. Trujillo whose telephone number is (571) 272-3677.

The examiner can normally be reached on M-F (7:30 am - 5:00 pm) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Trujillo
October 20, 2004


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